

CLEAR CHANNEL

www.clearchannel.com

June 14, 2001

To Whom It May Concern:

I have reviewed the statements by John Allen Airspace Consultants regarding Hoover, Okolona and Troy. These statements neglect the fact that there are several means to mitigate any predicted or actual electromagnetic interference.

In past cases where inter-modulation/overload has been at issue, the FAA has been willing to modify frequencies in order to mitigate the issue. I was involved in one such change at Chicago's O'Hare airport (ORD), involving 107.9 (then WYSY-FM) Aurora, IL. Additionally, Capstar Broadcast Licenses was involved in change to the ILS frequency in Shreveport, LA (SHV) as a result of an upgrade at KBED-FM.

The FAA has also approved new tower structures in the past when the licensee was willing to reduce spurious and/or harmonic emissions beyond those required by the FCC. Modern broadcast equipment is capable of harmonic suppression far in excess of the FCC requirement for -80 dBc. These further restrictions typically remain in place for a term of one year. Assuming there have been no complaints, the restrictions are removed.

It is also possible to mitigate these issues through the use of reduced spaced antennas. These antennas create less upward radiation and therefore create less chance of interference. The FAA analysis software utilizes a "worst case" isotropic radiator and is therefore, far more conservative than real world conditions.

Sincerely,

Jeff Littlejohn

Vice President – Engineering Services  
Clear Channel Broadcasting.

*Clear Channel Communications*

12th Floor 50 E. RiverCenter Blvd. Covington, Kentucky 41011 T 859 655 2267 F 859 655 9345

## **EXHIBIT E**

## **Engineering Statement**

### **In Support of a**

### **Supplemental Filing**

### **MM Docket 01-62**

### **Response to Assertions Made by Cox Radio**

#### **General**

In its Reply Comments filed in MM Docket 01-62, Cox Radio (“Cox”) makes assertions regarding the ability of Clear Channel Communications (“Clear Channel”) to use allocation coordinates proposed in its original Petition for Rule Making and in its Comments and Amended Proposal.

This supplemental filing addresses of each of the points Cox raises in those Reply Comments.

#### **AD288C2, Hoover, Alabama**

One of the issues Cox Radio raised was about Clear Channel’s ability to acquire the appropriate zoning approval to construct a tower for a class C2 facility that would provide coverage of 100% of Hoover with a 70 dBu contour. Exhibit IA in the attached exhibits shows that the proposed site is on the roof of the Riverchase Galleria office building, a building whose roofline is approximately 204 feet above ground level. The corresponding HAAT at this site is 36.1 meters. The hypothetical 70 dBu radius for 50 kW at 36.1 meters HAAT is 16.5 kilometers. See Exhibit IB. This radius is more than sufficient to cover 100% of Hoover, in compliance with Commission rules.

In addition to the allotment coordinates proposed by Clear Channel for channel 288C2 at Hoover, Exhibit IC shows that a considerable area exists that would allow for the

allocation of channel 288C2. Exhibit ID shows high-resolution roads and the location of the proposed allocation site inside Galleria Circle, in the heart of the business district of the city of Hoover.

Another series of issues that Cox asserted were those concerning alleged FAA problems with the proposed construction of a new tower in the city of Hoover. As the above statements demonstrate, Clear Channel's use of an existing rooftop eliminates not only zoning concerns, but most of the FAA concerns Cox raises as well. Cox does, however, assert that problems due to electromagnetic interference (EMI) are sufficient to prohibit the operation of channel 288C2 in Hoover.

Clear Channel challenges this claim on two fronts. First, the results of this study can be questioned, since the study uses the same FM transmitter frequency several times.

(Multiple station listings include, but are not limited to, WAQU, WVSU, WGIB, WTDR, WMJJ, WSSY, WKLD, WBHK, WLXY, WDXB, and WQEN). Since this obviously would not (and could not) happen, this study cannot be viewed as proof that EMI would occur. Furthermore, this study also assumes that channel 288A at Tuscaloosa would be operating simultaneously with channel 288C2 at Hoover. This obviously cannot happen, since these channel are mutually exclusive. It also assumes the operation of channel 290A at Trussville, another facility that is mutually exclusive with channel 288C2 at Hoover.

Even if EMI is an issue for the FAA, Clear Channel will agree to retune the appropriate FAA transmitter/receiver, a practice Clear Channel has undertaken, with success, in the past. (See attached letter from Jeff Littlejohn, director of engineering for Clear Channel.)

### AD280C2, Okolona, MS

Cox Radio asserts that FAA problems exist with the proposed allocation of channel 280C2 at Okolona, Mississippi. While Clear Channel does not acknowledge that any FAA problems exist with its proposed site, if such issues arise, they can be remedied. The coordinates used for channel 280C2 at Okolona merely represent the licensee's preferred site. These coordinates have nothing to do with the availability of sites or the size of the usable window. In fact, the usable window is 953 square kilometers and contains at least one existing tower. By relocating the proposed allocation coordinates of channel 280C2 to the existing tower, Clear Channel eliminates the FAA issue, while simultaneously reducing the site restriction back to Okolona. Exhibit IIA shows the window usable for channel 280C2 at Okolona, as well as the 70 dBu contour for a class C2 at this existing tower. Exhibit IIB is the antenna structure registration for this tower, showing not only that the tower exists, but also that it is of sufficient height to meet the needs of channel 280C2 at Okolona.

Assuming an aboveground height of 380 feet, the HAAT for AD280C2 at this tower is 116.2 meters (see Exhibit IIC). A class C2 facility at this height provides a 70 dBu contour radius of 29.1 kilometers. This distance easily covers 100% of Okolona. Exhibit IID shows that the existing tower is fully spaced, in accordance with the Commission's rules.

### AD289C0, Troy, AL

Cox provides a study showing that Clear Channel's proposed tower structure is incapable of receiving FAA approval. However, a study performed by another FAA consultant shows that a tower height necessary to achieve class C0 status is possible by making

some simple modifications at the Troy Municipal Airport. (See attached letter from Clair Billington, FAA consultant, describing a methodology for allowing Clear Channel to achieve a height necessary to maintain class C0 status at its proposed site.)

However, even if the Commission determines that sufficient evidence exists regarding the feasibility of Clear Channel's channel 289C0 site, Exhibit IIIA is a usable window that demonstrates a large usable area for this channel. Additionally, in its reply comments, Cox's FAA consultant shows a small area where a full class C0 tower site could be built. A portion of that area lies within the AD289C0 usable window, and that area is also shown on Exhibit IIIA.

#### AD267A, Linden, TN

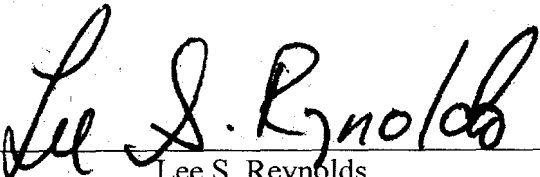
Another concern that Cox introduces in its Reply Comments is the matter of line of sight from the proposed coordinates for AD267A at Linden, Tennessee over the community of license. Exhibit IV A shows that line of sight can be achieved over Linden with the use of a 600-foot tower.

However, this is not the only site where channel 267A can be used at Linden. Exhibit IV B is an allocation study for a site near the Clear Channel site that can achieve line of sight over Linden with only a 410-foot tower. Exhibit IV C shows that the ground elevation at this alternate site is 800 feet MSL. Exhibit IV D is a series of line of sight studies using the same endpoint coordinates Cox used in its Reply Comments. This study demonstrates that line of sight can be achieved at this other site.

#### Summary

Clear Channel, by means of this supplemental filing, has demonstrated that none of the issues raised by Cox Radio in its reply comments warrant the denial of Clear Channel's

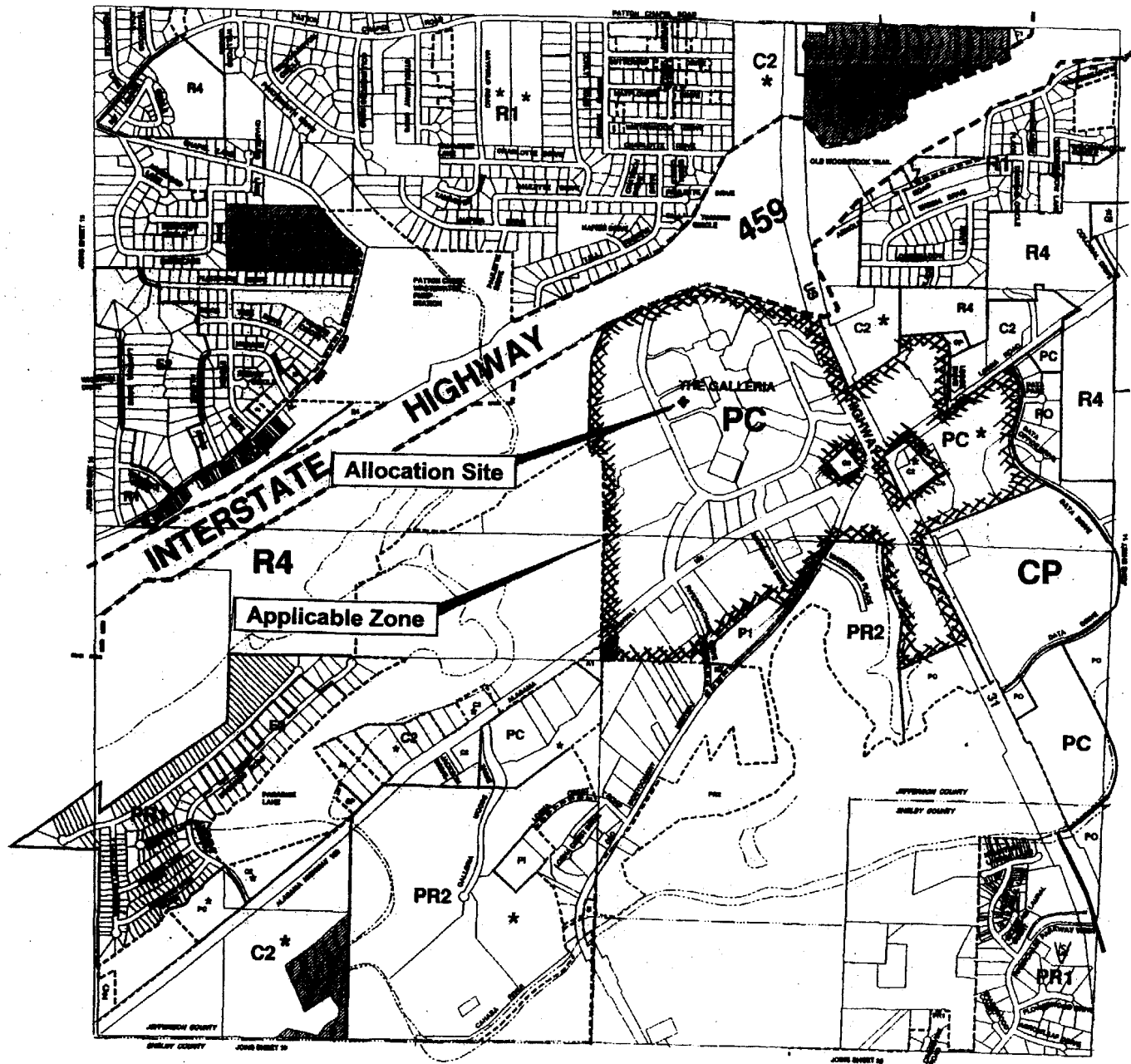
Petition and subsequent Comments and Amended Proposal. To the extent that Cox raises valid concerns, this supplemental filing demonstrates that solutions exist and are attainable.



Lee S. Reynolds

2421 Presidents Drive, Suite B-23  
Montgomery, AL 36116  
334.323.3620

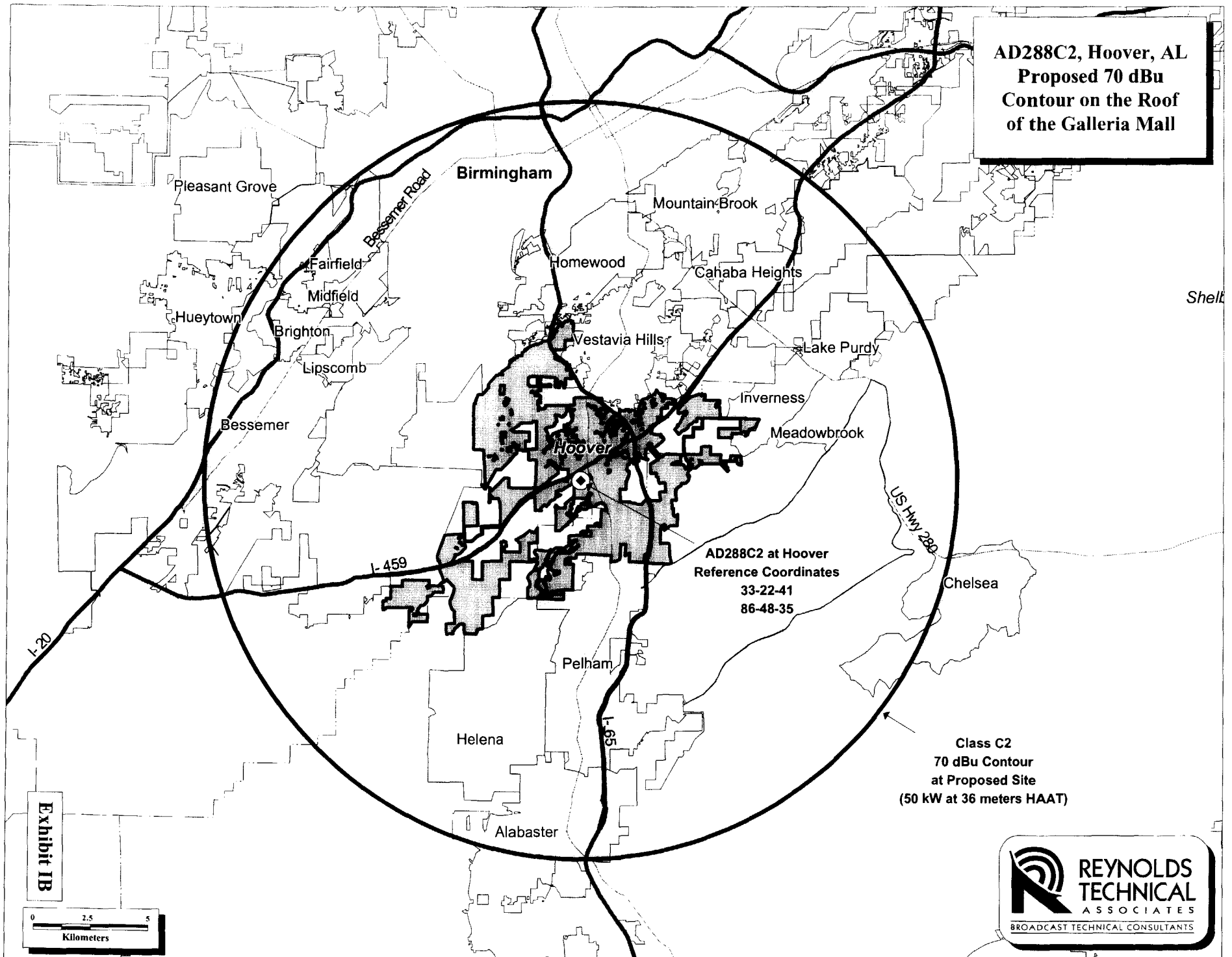
Exhibit 1A



SHEET 15

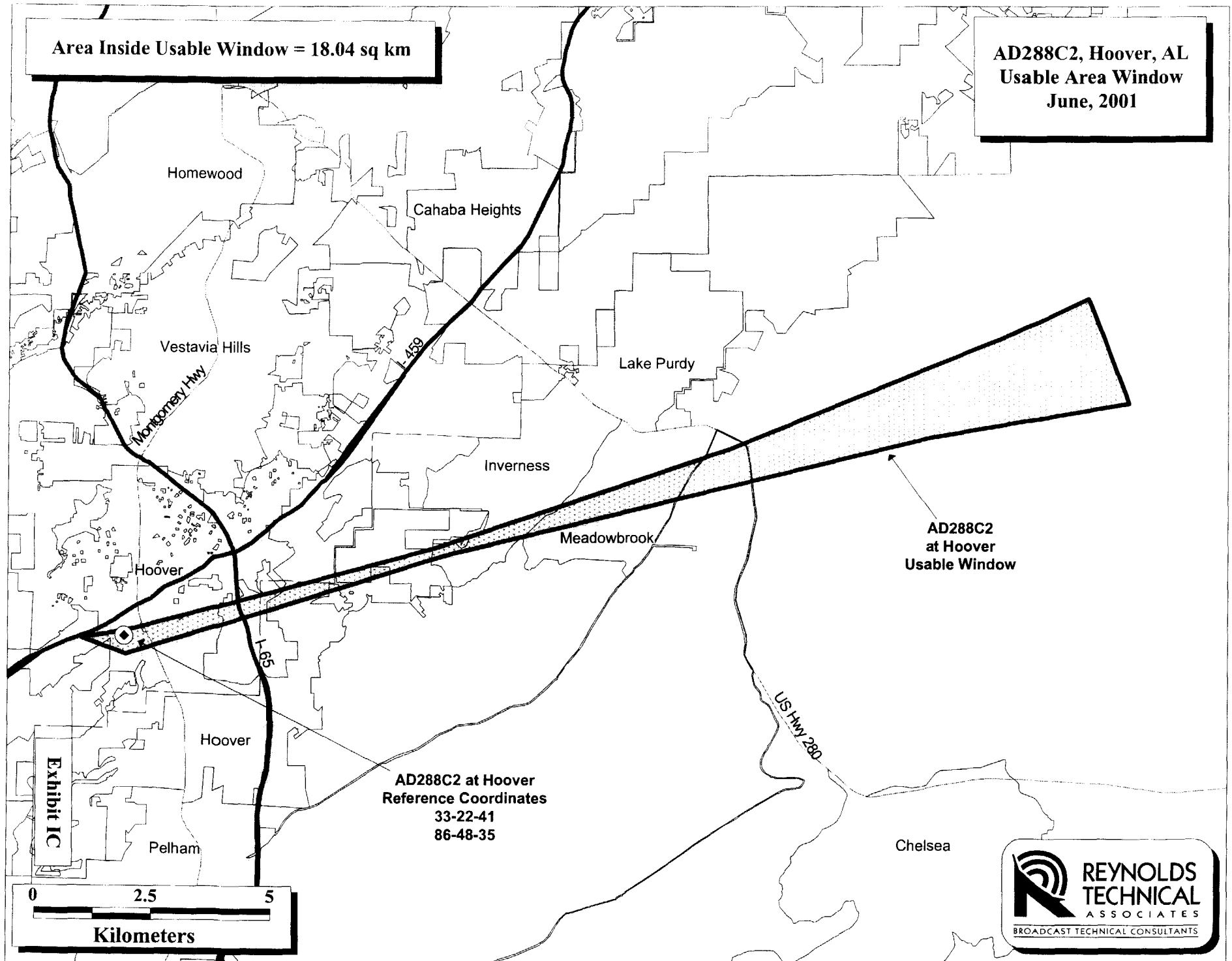


**AD288C2, Hoover, AL**  
**Proposed 70 dBu**  
**Contour on the Roof**  
**of the Galleria Mall**



Area Inside Usable Window = 18.04 sq km

AD288C2, Hoover, AL  
Usable Area Window  
June, 2001



AD288C2, Hoover, AL  
Allocation Coordinates Map  
Showing Coordinates are  
at the Riverchase Galleria

AD288C2 at Hoover  
Reference Coordinates  
33-22-41  
86-48-35

Usable  
Window

Galleria  
Circle

Cahaba River

Cahaba River

Hoover

Jefferson Gateway Memories C

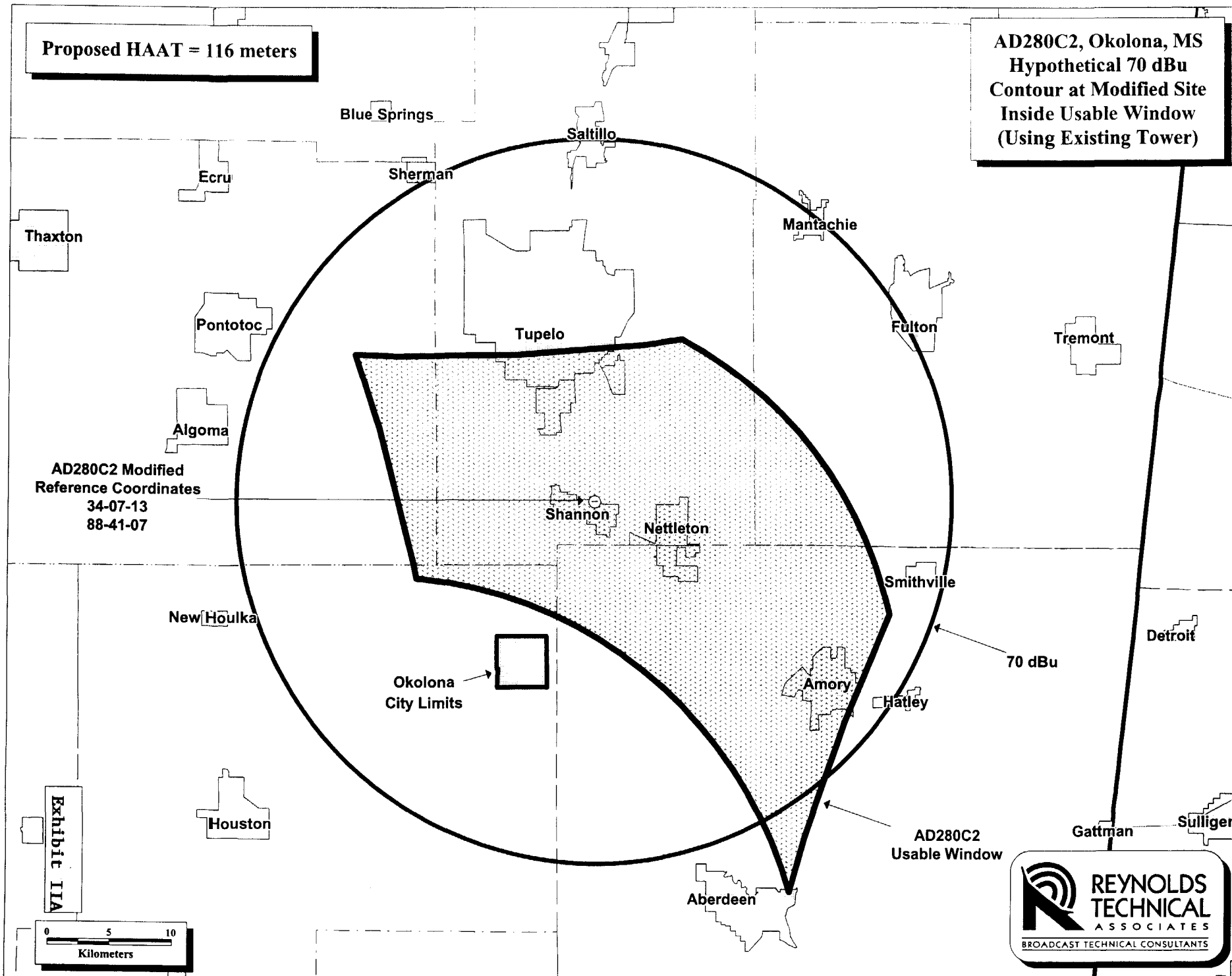
Exhibit ID

0 0.5 1  
Kilometers

 **REYNOLDS  
TECHNICAL  
ASSOCIATES**  
BROADCAST TECHNICAL CONSULTANTS

Proposed HAAT = 116 meters

AD280C2, Okolona, MS  
Hypothetical 70 dBu  
Contour at Modified Site  
Inside Usable Window  
(Using Existing Tower)



FCC 854 Main Form	FCC Application for Antenna Structure Registration	Approved by OMB 3060 - 0139 Est. Public Burden per Response: 30 minutes
		File Number: <b>A0160113</b>

### Purpose of Filing

1. Purpose of this filing: <b>Ownership change</b>
2A. For purpose codes of WD or AM, provide the file number of the pending application currently on file with the FCC: <b>A0160113</b>
2B. For purpose codes of MD, CA, AU, DI, NT, DU or OC provide FCC Registration Number: <b>1057381</b>
2C. If purpose code is MD or NT, provide date constructed or Last altered (mmddyy): <b>12/11/1998</b>
2D. If purpose code is DI, give date of dismantlement (mmddyy):

### Antenna Structure Ownership Information

3A) FCC ID of Owner/Assignee: <b>L00000959</b>	3B) Sub-Group Identification Number (SGIN) of Owner/Assignee: <b>001</b>	3C) FCC Registration Number (FRN) of Owner/Assignee:
4A) FCC ID of Assignor (for purpose code OC only): <b>L00000959</b>	4B) Sub-Group Identification Number (SGIN) of Assignor: <b>000</b>	4C) FCC Registration Number (FRN) of Assignor:
5) Legal Owner of Structure/Assignee First Name (if individual):	Middle Initial:	Last Name: Suffix:
6) Business Name (if other than Individual): <b>BellSouth Mobility LLC</b>		
7) Attention To: <b>FCC GROUP</b>		
8) P. O. Box:	And/Or	9) Street Address: <b>17330 PRESTON ROAD, SUITE 100A</b>
10) City: <b>DALLAS</b>	11) State: <b>TX</b>	12) ZIP Code: <b>75252</b>
13) Telephone Number: <b>9727332000</b>	14) E-Mail Address:	

### Contact Representative Information (If different from the Owner/Assignee)

15) First Name: <b>SUSAN</b>	MI:	Last Name: <b>WINZELER</b>	Suffix:
16) Business Name: <b>CINGULAR WIRELESS LLC</b>			
17) P.O. Box:	And/Or	18) Street Address: <b>17330 PRESTON ROAD, SUITE 100A</b>	
19) City: <b>DALLAS</b>	20) State: <b>TX</b>	21) Zip Code: <b>75252</b>	
22) Telephone Number: <b>9727336103</b>		23) E-Mail Address:	

### Antenna Structure

24) NAD83 Antenna Structure Latitude (DD-MM-SS.S): <b>34-7-13.0 ( N )N or S</b>	25) NAD83 Antenna Structure Longitude (DDD-MM-SS.S): <b>88-41-7.0 ( W )N or S</b>
26) Address or Geographical Location: <b>1023 TRICE STREET</b>	
27) City: <b>SHANNON</b>	28) State: <b>MS</b>
29) Elevation of site above mean sea level (refer to "a" in antenna structure examples):	<b>84.4 meters</b>
30) Overall (highest) height above ground (AGL) of an antenna structure INCLUDING all appurtenances (antennas, dishes, lightning rods, obstruction lighting, etc.) (refer to "c" in antenna structure examples):	<b>128.0 meters</b>
31) Overall height above mean sea level (sum total of items 29 and 30):	<b>212.4 meters</b>
32) Overall height above ground level (AGL) of the supporting structure itself WITHOUT appurtenances (refer to "b" in antenna structure examples):	<b>121.9 meters</b>
33) Indicate the code for the type of structure on which antenna will be mounted (i.e., pole, building, water tank, silo, tower, etc.) (See Instructions): <b>TOWER</b>	
34-35) If type of structure is an Array, provide coordinates for center of the array below:	
34) NAD83 Array Center Latitude (DD-MM-SS.S): <b>- ( N )N or S</b>	35) NAD83 Array Center Longitude (DDD-MM-SS.S): <b>- ( W )N or S</b>

**Exhibit IIB**

## FAA Notification

36) FAA Study Number: 98-ASO-6422-OE	37) Date Issued (mmddyy): 10/07/1998
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## Environmental Assessment

38) ( N )	Yes No	Would a Commission grant of Authorization for this location be an action which may have significant environmental effect? See Section 1.1307 of 47 CFR. If 'YES', submit an environmental assessment as required by 47 CFR, Sections 1.1308 and 1.1311.
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## Certification Statements

1) The applicant certifies that all statements made in this application and in the exhibits, attachments, or documents incorporated by reference are material, are part of this application, and are true, complete, correct, and made in good faith.
2) The applicant certifies that neither the applicant nor any other party to the application is subject to a denial of Federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. § 862, because of a conviction for possession or distribution of a controlled substance. See Section 1.2002(b) of the rules, 47 CFR § 1.2002(b), for the definition of 'party to the application' as used in this certification.

## Signature

39) Typed or Printed Name of Party Authorized to Sign

First Name: KELLYE	MI:	Last Name: ABERNATHY	Suffix:
40) Title: EXEC DIR REGULATORY SERVICES			
41) Signature: KELLYE ABERNATHY		42) Date (mmddyy): 01/22/2001	
WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ANY ATTACHMENTS ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. Code, Title 18, Section 1001) AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. Code, Title 47, § 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, § 503).			

**Engineering Statement  
In Support of a  
Supplemental Engineering Exhibit**

**AD280C2, Okolona, Mississippi Alternate Site Terrain Study  
(Calculating a Reasonable Number for the HAAT at the Existing Tower)**

Reference Coordinates:

North Latitude: 34-07-13

West Longitude: 88-41-07

Your chosen antenna height is 200.0 meters A. M. S. L.

<u>Azimuth</u>	<u>Terrain Average</u>	<u>Antenna Height</u>
0.0°:	269.1 feet ( 82.0 meters), A. A. T.	387.0 feet ( 118.0 meters).
45.0°:	290.9 feet ( 88.7 meters), A. A. T.	365.3 feet ( 111.3 meters).
90.0°:	269.3 feet ( 82.1 meters), A. A. T.	386.9 feet ( 117.9 meters).
135.0°:	195.0 feet ( 59.4 meters), A. A. T.	461.2 feet ( 140.6 meters).
180.0°:	288.7 feet ( 88.0 meters), A. A. T.	367.4 feet ( 112.0 meters).
225.0°:	305.6 feet ( 93.1 meters), A. A. T.	350.6 feet ( 106.9 meters).
270.0°:	290.0 feet ( 88.4 meters), A. A. T.	366.2 feet ( 111.6 meters).
315.0°:	291.7 feet ( 88.9 meters), A. A. T.	364.4 feet ( 111.1 meters).
Average of 8 :	275.0 feet ( 83.8 meters); HAAT	381.1 ft ( <u>116.2</u> meters).

**Engineering Statement  
In Support of a  
Supplemental Engineering Exhibit**

**AD280C2, Okolona, Mississippi Alternate Site Allocation Study  
(Demonstrating that the Existing Reference Tower is Fully Spaced)**

REFERENCE		DISPLAY DATES
34 07 13 N	CLASS = C2	DATA 06-09-01
88 41 07 W	Current Spacings	SEARCH 06-14-01
----- Channel 280 - 103.9 MHz -----		
Call	Channel	Location
-----	-----	-----
Community of	Okolona	MS
Reference Coordinates:		
North Latitude: 34-00-06		
West Longitude: 88-45-19		
RADD	ADD 280C2	Okolona
Of no concern:		
Originally proposed allocation coordinates		
RDEL	DEL 280C2	Columbus
WACRFM	LIC 280C2	Columbus
Of no concern:		
Licensed site of WACR		
Before proposed modification		
R---	279A	Vardaman
R---	279A	Derma
Of concern:		
MX proposals in instant PRM		
Channel 258A offered as substitute channel		
WSYE	LIC 227C	Houston
WTNV	LIC 281C1	Jackson
WCLDFM	LIC 280C3	Cleveland
961118	APP 283C3	State College
961118	APP 283C3	State College
RADD	ADD 279C1	Trussville
ALLO	VAC 283C3	State College
961118	APP 283C3	State College
961118	APP 283C3	State College
961115	APP 283C3	State College
ALLO	VAC 279C	Gadsden
951019	CP 280C3	Earle
-----		



Area Inside Usable Window = 492 sq km

AD289C0, Troy, AL  
Usable Area Window  
June, 2001

AD289C0 at Troy  
Reference Coordinates  
31-52-03  
86-14-58

Area Cox's FAA Consultant  
States Where 450 meters  
HAAT is Possible

AD289C0 at Troy, AL  
Usable Window

Exhibit IIIA

Luverne

Goshen

Troy

Banks

Brundidge

0 5 10

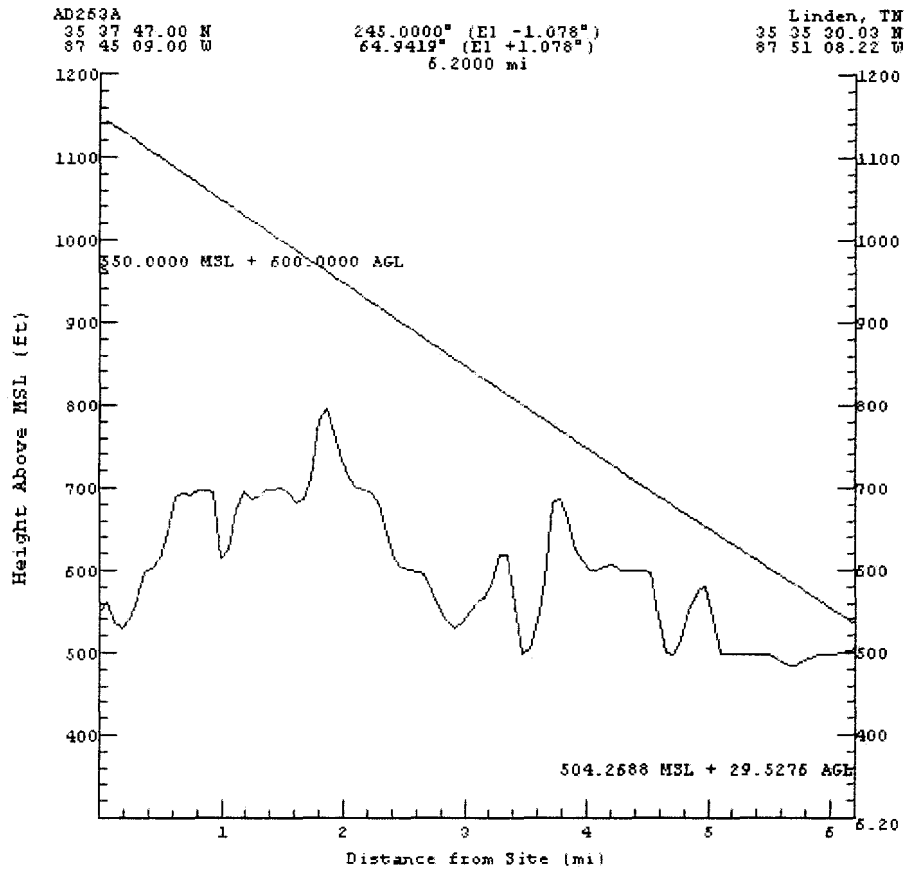
Kilometers

 **REYNOLDS  
TECHNICAL  
ASSOCIATES**  
BROADCAST TECHNICAL CONSULTANTS

## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee

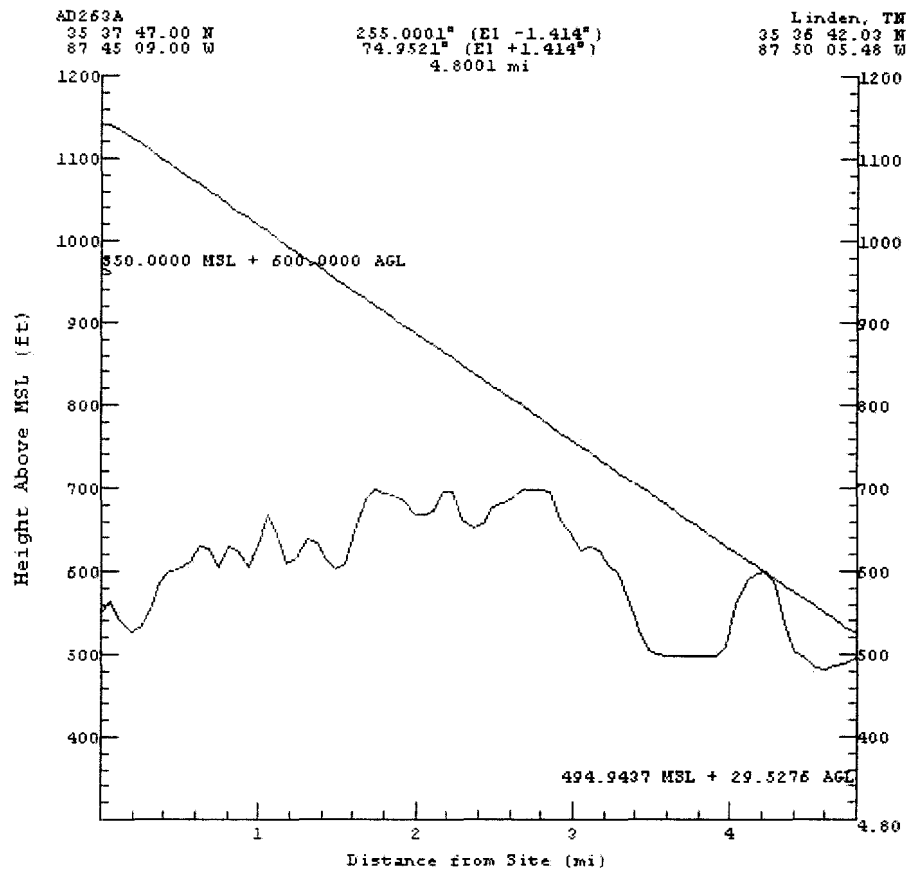


245° Terrain Profile From Proposed Reference Point

## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee

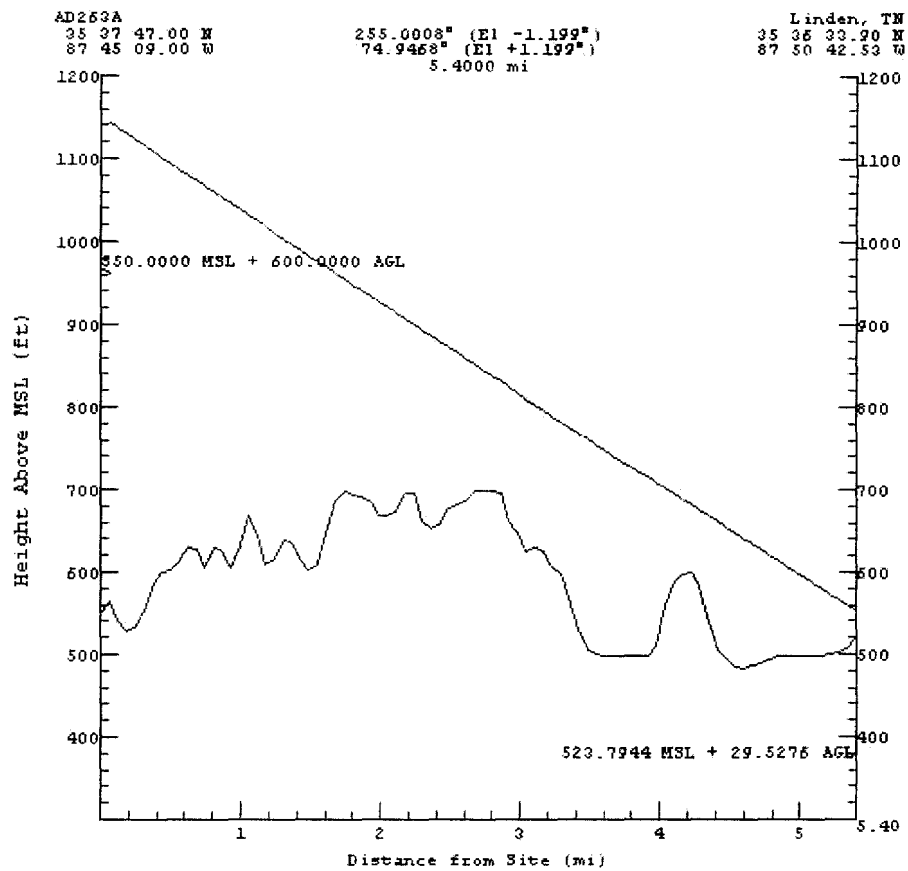


255° Terrain Profile From Proposed Reference Point (Nearest Point in City)

## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee

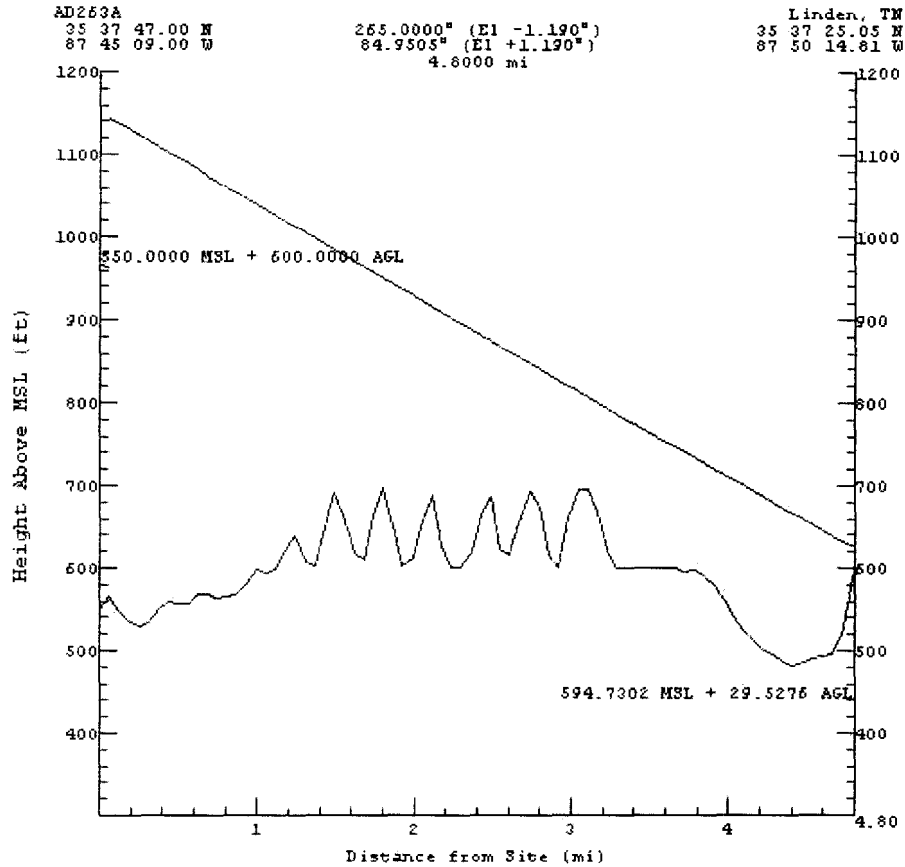


255° Terrain Profile From Proposed Reference Point (Farthest Point in City)

## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee



265° Terrain Profile From Proposed Reference Point

**Engineering Statement  
In Support of a  
Supplemental Engineering Exhibit**

**AD267A, Linden, Tennessee Alternate Site Allocation Study  
(Showing That the Alternate Site for Channel 267A at Linden is Fully Spaced)**

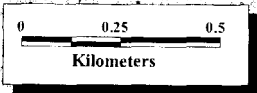
REFERENCE		DISPLAY DATES				
35 37 53 N	CLASS = A	DATA 06-09-01				
87 44 40 W	Current Spacings	SEARCH 06-09-01				
----- Channel 267 - 101.3 MHz -----						
Call	Channel	Location	Dist	Azi	FCC	Margin
-----						
Community of	Linden	TN	8.78	259.4		
Reference Coordinates:						
North Latitude: 35-37-01						
West Longitude: 87-50-22						
WJORFM LIC 268A	St. Joseph	TN	71.61	162.9	72.0	-0.39
RADD ADD 267C3	South Fulton	TN	142.13	309.7	142.0	0.13
WZTO LIC 266C1	Russellville	KY	137.61	43.4	133.0	4.61
WAUO LIC 214A	Hohenwald	TN	18.45	113.4	10.0	8.45
WTPRFM LIC 268A	Mckinnon	TN	88.81	347.0	72.0	16.81
WNWSFM LIC 268A	Jackson	TN	92.88	271.6	72.0	20.88
WRRS.C CP 266C	Cullman	AL	188.25	155.8	165.0	23.25
WRRS LIC 266C	Cullman	AL	188.33	155.8	165.0	23.33
ALLO VAC 267C3	Tiptonville	TN	167.20	298.1	142.0	25.20
ALLO ADD 267C3	Tiptonville	TN	167.20	298.1	142.0	25.20
WORMFM LIC 269A	Savannah	TN	62.62	226.1	31.0	31.62
WVHR LIC 265C3	Huntingdon	TN	74.03	299.0	42.0	32.03
WKOM LIC 269A	Columbia	TN	63.61	91.1	31.0	32.61
RDEL DEL 267C3	Tiptonville	TN	176.67	298.6	142.0	34.67
-----						

Alternate Site for  
Channel 267A  
at Linden, TN  
Proving Site Elevation  
is 800 Feet MSL

Alternate  
Channel 267A  
Coordinates  
35-37-53  
87-44-40

Copyright (c) 1997 Horizons Technology, Inc.

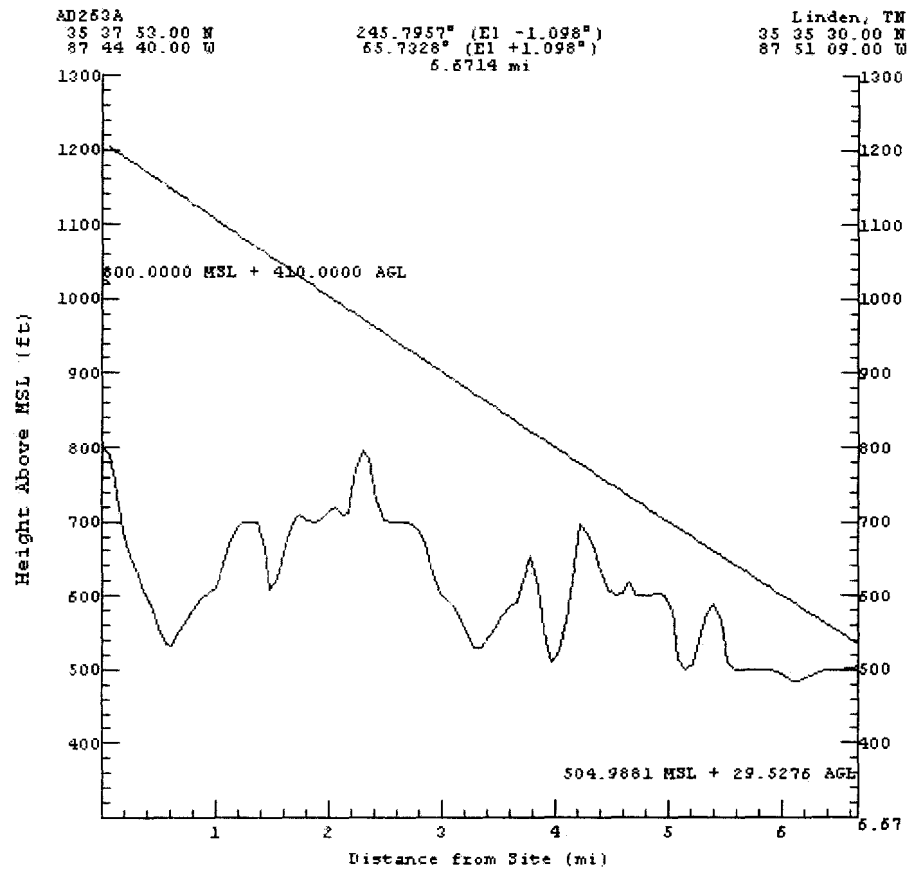
Exhibit IV C



## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee



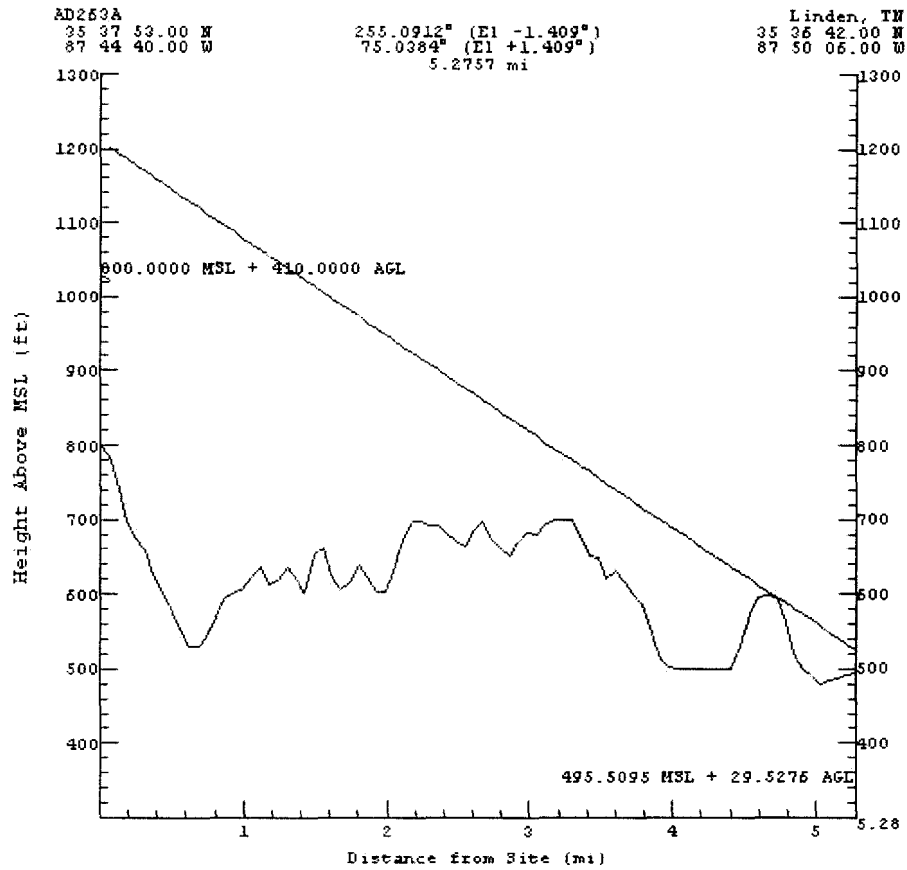
245.8° Terrain Profile From Proposed Reference Point



## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee

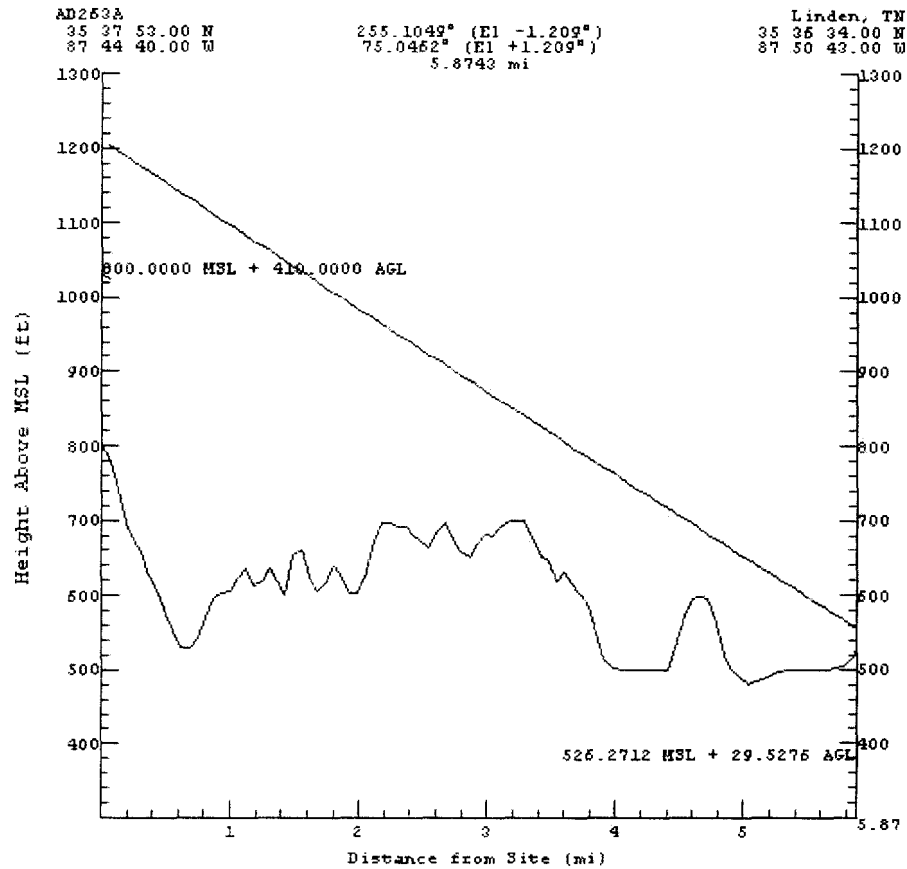


255.1° Terrain Profile From Proposed Reference Point (Nearest Point)

## Engineering Statement

### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee

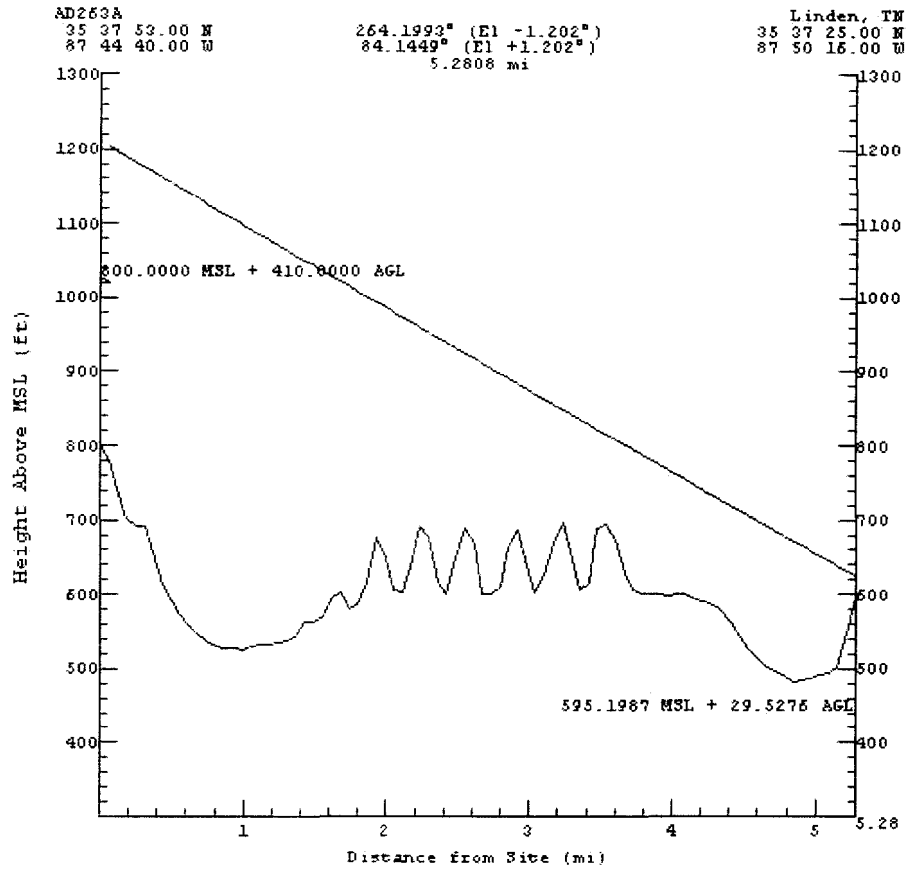


255.1° Terrain Profile From Proposed Reference Point (Farthest Point)

## Engineering Statement

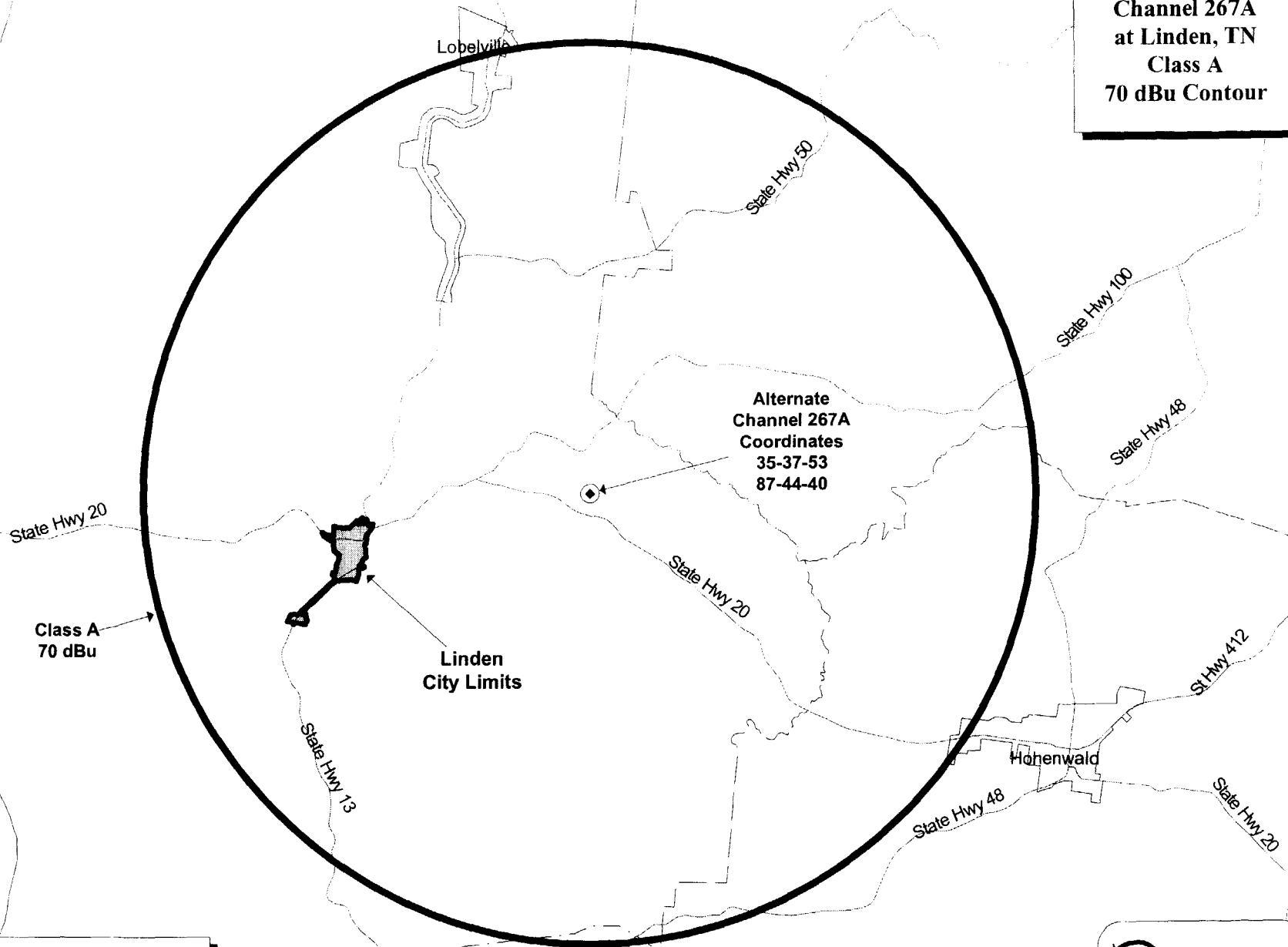
### In Support of Supplemental Engineering

#### Terrain Profile for AD263A, Linden, Tennessee



#### 264.2° Terrain Profile From Proposed Reference Point

**Alternate Site for  
Channel 267A  
at Linden, TN  
Class A  
70 dBu Contour**



**Exhibit IV E**



## CERTIFICATE OF SERVICE

I, Lisa M. Balzer, a secretary in the law firm of Shook, Hardy and Bacon, do hereby certify that I have on this 22nd day of June, 2001 caused to be mailed by first class mail, postage prepaid, copies of the foregoing **“SUPPLEMENTAL COMMENTS”** to the following:

- \* Ms. Nancy V. Joyner  
Federal Communications Commission  
Mass Media Bureau  
445 12th Street, SW  
Room 3-A267  
Washington, DC 20554

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T & W Communications, Inc.  
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Columbus, MS 39703

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Nam E. Kim, Esq.  
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Ad-Media Corporation  
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Winfield, AL 35594

M. Scott Johnson, Esq.  
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Washington, DC 20005-3317  
(Counsel to Ad-Media Corporation)

Station WKEA-FM  
KEA Radio, Inc.  
P.O. Box 966  
Scottsboro, AL 35768

Station WKSR  
Pulaski Broadcasting, Inc.  
P.O. Box 738  
Pulaski, TN 38478

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McC Campbell & Young  
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Lisa M. Balzer

\* HAND DELIVERED